ABSTRACT OF THE DISCLOSURE

A method and apparatus for tuning a feedforward compensation parameter in a motion control system is provided. According to one such embodiment, the method includes the acts of determining an initial value of a feedforward compensation parameter and commanding an initial movement of an actuator according to a test motion routine (wherein the initial value of the parameter is used in the control of the actuator). Error associated with the initial movement is determined. A potential value of the feedforward compensation parameter is determined. A movement of the actuator is commanded according to the test motion routine (wherein the potential value of the parameter is used in the control of the actuator) and error associated with the movement is determined. The errors associated with the movements are compared and, based on the act of comparing the errors, one of the values is selected as a current best value. In a further embodiment, such acts are repeated until the current best value is an optimum value.